

Examiner My-Chau T. Tran Group art Unit: 1639 Attorney Docket No. 30626-101

REMARKS/ ARGUMENTS

The Final Office Action of February 9, 2003 has been carefully reviewed and this response addresses the Examiner's concerns.

In the specification, the amendment filed on 12/2/02 for page 7 (lines 9-19) was objected to under 35 U.S.C. 112 for introducing new matter. Applicants respectfully request reconsideration based on MPEP 608.01(l). MPEP 608.01(l) states that " [i]n establishing a disclosure, applicant may rely not only on the description and drawing as filed but also on the original claims if their content justifies it." Claims 6, 27, 49 of the original disclosure read as follows:

- 6. A method according to claim 5, wherein said substrate is a solid phase composition comprising silicon, glasses, plastics, polymers, metals, ceramics or mixtures thereof
- 27. A method according to claim 26, wherein said substrate is a solid phase composition comprising silicon, glasses, plastics, polymers, metals, ceramics or mixtures thereof
- 49. A method according to claim 48, wherein said substrate is a solid phase composition comprising silicon, glasses, plastics, polymers, metals, ceramics or mixtures thereof.

Applicant respectfully asserts that the original claims support the inclusion of ceramics as substrates in the specification.

Claims 1-3, 6-7, 10-12, 14-19, 66-67 and 69-70 are pending in the application. Claims 22-65 are withdrawn from consideration.

In view of the examiner's earlier restriction requirement, applicant retains the right to present claims 22-65 in a divisional application

Claim 66 is rejected based on 35 U.S.C. 112, paragraph 1. Applicants respectfully request reconsideration of Claim 66 based on the argument presented above, on MPEP 608.01(l) and original claims 6, 27, and 49.



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Claims 1-2, 10, 12, 14, and 69-70 were rejected under 35 U.S.C. §102(b) as being anticipated by Hutchens et al., U.S. Patent 5,719,060. Claims 1-3, 10, 12, 14, 17, 66 and 69-70 are rejected under 35 U.S.C. §102(e) as being anticipated by Nelson et al.(U.S. Patent 5,955,729). Claims 1-2, 6-7, 10-12, 14, 17, 66 and 69-70 are rejected under 35 U.S.C. §102(e) as being anticipated by Siusdak et al. (U.S. Patent 6,288,390). Claims 1-2, 6-7, 10-12, 14, 17, 66 and 69-70 are rejected under 35 U.S.C. §103(a)as being unpatentable over Siusdak et al. (U.S. Patent 6,288,390) in view of Mian et al. (6,319,469). Claims 1 and 15-16 are rejected under 35 U.S.C. §103(a)as being unpatentable over Siusdak et al. (U.S. Patent 6,288,390) in view of farmer et al. (J. Mass Spectrom., 1998. 3:697-704).

Support in the Specification to Amendments to Claim 1 and Added Claims 119-124

The obtaining of a desired morphology of a deposited thin film is supported by p. 7, lines 9-10, p.8, lines 23-25, p. 10, lines 18-24 of the patent application. The <u>desired morphology being tailored</u> is supported by p.4., lines 20-21, p.9, lines 21-22, p. 10, lines 21-24. The <u>said continuous thin film being substantially void free</u> is supported by p.6, lines 22. The amendment is offered for elucidation and is not a limitation since the applicants are their own lexicographers and p. 6, line 22 define a continuos film as being void free.

The tailoring of the morphology and the absence of an organic matrix (p. 27, lines 13-14) would enable one having ordinary skill in the art to recognize that the <u>sample is not attached to the thin film by chemical attachment to surface associated molecules</u>. The originally filed disclosure would convey to one skilled in the art that the <u>sample is not attached to the thin film by chemical attachment to surface associated molecules</u>.(see *Ex parte Parks*, 30 USPQ 2d 1234, 1237 (Bd. Pat. App., & Int. 1993) quoted in MPEP 2173.05(i)).

Added claim 119 is an apparatus claim corresponding to method claim 1 and obtains support in the specification in the same manner as claim 1. Claim 120 is an apparatus claim corresponding to method claim 2 and obtains support in the specification in the same manner as claim 2. Claim 120 is an apparatus claim corresponding to method claim 2 and obtains support in the specification in the same manner as claim 2. Claim 121 is an apparatus claim corresponding to method claim 6 and obtains support in the specification in the same manner as claim 6. Claim



122 is an apparatus claim corresponding to method claim 7 and obtains support in the specification in the same manner as claim 7. Claim 123 is an apparatus claim corresponding to method claim 66 and obtains support in the specification and the original claims in the same manner as claim 66. Claim 120 is an apparatus claim corresponding to method claim 67 and obtains support in the specification in the same manner as claim 67.

Claims 1-2, 10, 12, 14, and 69-70 were rejected under 35 U.S.C. §102(b) as being anticipated by Hutchens et al., U.S. Patent 5,719,060.

Applicants respectfully traverse these rejections for the reasons presented below.

In order to better understand the differences between present invention and the Hutchens et al. patent it should be recognized that in the Applicants' invention the films are morphologically tailored to enable the applying a sample to a deposited continuous thin film by either adsorption or directly to a surface of said deposited continuous thin film without having to provide surface associated molecules to which the sample is chemical attached.

In comparison, the '060 patent (Hutchens) discloses sample presenting means utilizing surface associated molecules to effectuate the chemical attachment of sample to the sample presenting means (col. 14, lines 36-41).

Hutchens does not disclose obtaining a desired morphology of a deposited thin film where the <u>desired morphology is tailored</u>. The tailoring of the morphology and the absence of an organic matrix (p. 27, lines 13-14) would enable one having ordinary skill in the art to recognize that the <u>sample is not attached to the tailored morphology thin film by chemical attachment to surface associated molecules</u>. The originally filed disclosure would convey to one skilled in the art that the <u>sample is not attached to the tailored morphology thin film by chemical</u> attachment to surface associated molecules.

To anticipate a claim a reference must teach every element of the claim. (MPEP § 2131). Hutchens does not teach a deposited thin film having a <u>desired tailored morphology</u>.

Applicants respectfully assert that amended Claim 1 is not anticipated by the '060 patent (Hutchens) and neither are any of the dependent claims.



Examiner My-Chau T. Tran Group art Unit: 1639 Attorney Docket No. 30626-101

Claims 1-3, 10, 12, 14, 17, 66 and 69-70 were rejected under 35 U.S.C. §102(e) as being anticipated by Nelson et al.(U.S. Patent 5,955,729).

Applicants respectfully traverse these rejections for the reasons presented below.

Nelson et al (*U.S. Patent 5,955,729*) also disclose utilizing surface associated molecules to effectuate the chemical attachment of sample to the surface. (col. 3, lines 64-66, col. 8, lines 29-33).

Nelson does not disclose obtaining a desired morphology of a deposited thin film where the <u>desired morphology is tailored</u>. The tailoring of the morphology and the absence of an organic matrix (p. 27, lines 13-14) would enable one having ordinary skill in the art to recognize that the <u>sample is not attached to the tailored morphology thin film by chemical attachment to surface associated molecules</u>. The originally filed disclosure would convey to one skilled in the art that the <u>sample is not attached to the tailored morphology thin film by chemical attachment to surface associated molecules</u>.

To anticipate a claim a reference must teach every element of the claim. (MPEP § 2131). Nelson does not teach a deposited thin film having a <u>desired tailored morphology</u>.

Applicants respectfully assert that amended Claim 1 is not anticipated by the '729 patent (Nelson) and neither are any of the dependent claims.

Claims 1-2, 6-7, 10-12, 14, 17, 66 and 69-70 are rejected under 35 U.S.C. §102(e) as being anticipated by Siusdak et al. (U.S. Patent 6,288,390)

Applicants respectfully traverse these rejections for the reasons presented below.

In order to better understand the differences between Applicants' invention and the '390 (Siusdak) patent should be recognized that the Applicants' invention is directed to deposited films that are morphologically tailored to enable the applying a sample to the deposited continuous thin film. Siusdak et al. disclose loading a sample (analyte) onto a porous semiconductor substrate. Applicants in p.6, lines 6-17 describe how pores are voids. The claimed continuous film is substantially void free. Siusdak invention would be rendered inoperable if a continuous, void (pore) free semiconductor substrate were used.



Siusdak does not teach use of <u>continuous thin film</u>, wherein the <u>continuous film is substantially void free</u>. The Applicants respectfully assert that amended Claim 1, wherein the <u>continuous film is substantially void free</u>, is not anticipated by the '390 patent (Siusdak) and neither are any of the dependent claims.

Claims 1-2, 6-7, 10-12, 14, 17, 66 and 69-70 are rejected under 35 U.S.C. §103(a)as being unpatentable over Siusdak et al. (U.S. Patent 6,288,390) in view of Mian et al. (6,319,469).

Siusdak does not disclose a method for the analysis of a sample including applying the sample to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film, wherein the *continuous film is substantially void free*. Mian does not disclose a method for the analysis of a sample including applying the sample to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film, wherein the *continuous film is substantially void free*. Siusdak when combined with Mian does not teach a method for the analysis of a sample including applying the sample to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film, wherein the *continuous film is substantially void free*.

Under a 103 rejection, a prima facie case of obviousness of the invention is made in view of the scope and content of the prior art. In order to establish a *prima facie* case of obviousness, " there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references) must teach or suggest all of the claim limitations." MPEP § 2143.

Neither Siusdak nor Mian separately or in combination teach all the limitations of amended claim 1. In light thereof, Applicants respectfully traverse the 35 U.S.C. 103 rejection of the claims.

Claims 1 and 15-16 are rejected under 35 U.S.C. §103(a)as being unpatentable over Siusdak et al. (U.S. Patent 6,288,390) in view of farmer et al. (J. Mass Spectrom., 1998. 3:697-704).



Siusdak does not disclose a method for the analysis of a sample including applying the sample to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film, wherein the *continuous film is substantially void free*. Farmer does not disclose a method for the analysis of a sample including applying the sample to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film, wherein the *continuous film is substantially void free*. Siusdak when combined with Farmer does not teach a method for the analysis of a sample including applying the sample to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film, wherein the *continuous film is substantially void free*.

Under a 103 rejection, a prima facie case of obviousness of the invention is made in view of the scope and content of the prior art. In order to establish a *prima facie* case of obviousness, " there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references) must teach or suggest all of the claim limitations." MPEP § 2143.

Neither Siusdak nor Farmer separately or in combination teach all the limitations of amended claim 1. In light thereof, Applicants respectfully traverse the 35 U.S.C. 103 rejection of the claims.

In conclusion, in view of the above remarks, Applicants respectfully request the Examiner find all claims 1-3, 6-7, 10-12, 14-19, 66-67 and 69-70 as amended allowable over the prior art and pass this case to issue.

Any required fees should be charged to Deposit Account No. 03-2410, Order No. 30626-101.



In accordance with Section 714.01 of the MPEP, the following information is presented in the event that a call may be deemed desirable by the Examiner:

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Respectfully submitted,

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